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वाहक सुरक्षा हेतु अनुशंसित रीति संहिता  
भाग 5 एप्रन वाहक/एप्रन फीडर  
(दूसरा पुनरीक्षण)

**Code of Recommended Practice for  
Conveyor Safety**  
**Part 5 Apron Conveyors/Apron Feeders**  
( Second Revision )

ICS 53.040.10

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Price Group 3

Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee,  
MED 06

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards on recommendation of the Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee, had been approved by the Mechanical Engineering Divisional Council.

This Indian Standard (Part 5) first published in 1974 and subsequently revised in 1990. It covers the recommended practice to be adopted in the safe use of conveyors and conveying machinery used for transportation of bulk materials or unit loads.

Apron conveyor/feeder essentially consist of a drive frame, a drive, take-up, sprockets and pans fixed to chains which form the main pulling members. The pulling chains in mesh with the sprocket are driven at the head section from the drive unit, the pans move along the longitudinal axis of the conveyor and the supporting rollers rotate guiding the chain.

This revision has been taken up to keep pace with the latest technological developments. In this revision, the standard has been brought into latest style and format of Indian Standards, and references to Indian Standards, wherever applicable have been updated.

The code of recommended practice for conveyor safety is in eight parts. This standard (Part 5) covers the safety requirements in apron conveyors or feeders. Other parts in this series under the general title are as follows:

- Part 1 General information
- Part 2 General safety requirements
- Part 3 Belt conveyors and feeders
- Part 4 Vibrating conveyor/feeders
- Part 6 Selection, training and supervision of operators
- Part 7 Inspection and maintenance
- Part 8 Flight conveyors

The composition of the committee responsible for the formulation of this standard is listed in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***CODE OF RECOMMENDED PRACTICE FOR CONVEYOR  
SAFETY****PART 5 APRON CONVEYORS/APRON FEEDERS***( Second Revision )***1 SCOPE**

This standard (Part 5) covers specific safety requirements for apron conveyors/apron feeders. These requirements are in addition to the general information and general safety requirements given in IS 7155 (Part 1) and IS 7155 (Part 2) respectively.

**2 REFERENCES**

The standards listed below, contain provisions which, through their reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below.

<i>IS No.</i>	<i>Title</i>
IS 7155	Code of recommended practice for conveyor safety:
(Part 1) : 1986	General information ( <i>first revision</i> )
(Part 2) : 1986	General safety requirements ( <i>first revision</i> )

**3 SPECIFIC SAFETY REQUIREMENTS**

**3.1** Besides statutory and other requirements relating to safety in general, specific safety requirements shall be observed at the following stages:

- During the construction stage (design, and manufacture);
- During the installation stage (design, commissioning and entry into service); and
- During the utilization stage (operation and maintenance).

**3.2 During the Construction Stage (Design and Manufacture)**

**3.2.1** At the design and construction stage, the selection of materials, hardware and components shall depend upon the duty conditions of the conveyor and characteristics of the material to be transported.

**3.2.2** Chains and chain sprockets shall be suitably selected for the conveyor arrangement.

**3.3 During the Installation Stage (Design, Commissioning and Entry into Service)**

**3.3.1** Proper leveling of foundation and alignment of head and tails sections and intermediate section along with the chain tracks shall be ensured.

**3.3.1.1** Alignment of drive unit shall also be ensured.

**3.3.2** In the case of inclined conveyors, if required, a hold back shall be provided.

**3.3.3** Adequate guarding and protection shall be provided to prevent injury to the personnel and these shall be installed at all the necessary points. A reference to IS 7155 (Part 2) may be helpful in deciding the provisions of guarding and protection to be provided.

**3.4 During the Utilization Stage (Operation and Maintenance)**

**3.4.1** Periodical adjustments of take ups shall be necessary to keep the chains under the required tension and to prevent the aprons from whipping during operation.

**3.4.2** Maintenance to apron conveyor/feeder shall be effected only on taking total shut down of the system.

**ANNEX A**  
(Foreword)

**COMMITTEE COMPOSITION**

Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional  
Committee, MED 06

<i>Organization</i>	<i>Representative(s)</i>
Rites Limited, Gurugram	SHRI D. MAJUMDAR ( <i>Chairperson</i> )
CSIR — Central Institute for Mining and Fuel Research, Dhanbad	SHRI DEBASHISH BASAK SHRI GIRENDRA M. PRASAD ( <i>Alternate</i> )
Conveyor and Ropeway Services Private Limited, Kolkata	SHRI S. SHEKHAR CHKRAVARTY SHRI KAMAL KUMAR BOSE ( <i>Alternate</i> )
Damodar Ropeways & Infra Limited, Kolkata	SHRI D. L. DAS
Directorate General Factory Advice Service and Labour Institutes, Mumbai	SHRI G. P. NIJALINGAPPA SHRI H. M. BHANDARI ( <i>Alternate</i> )
Directorate General of Mines Safety, Dhanbad	SHRI D. B. NAYAK SHRI VIJAY YADAORAO BARAPATRE ( <i>Alternate</i> )
Durgapur Steel Plant, Sail Durgapur	SHRI SANJAY KUMAR SHRI DEEPAK BISWAL ( <i>Alternate</i> )
Indian Association of Amusement Parks and Industries, Mumbai	SHRI PRADEEP SHARMA SHRI ANIL PADWAL ( <i>Alternate</i> )
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Rites Limited, Gurugram	SHRI DINESH KUMAR
Ropeway and Resorts Private Limited, Kolkata	SHRI BIPLAB DAS SHRI SUDIPTA KRISHANA ( <i>Alternate</i> )
Tata Consulting Engineers Limited, Navi Mumbai	SHRI SHIREESH S. SWAMI ( <i>Alternate</i> )
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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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